**Before the**

**FEDERAL COMMUNICATIONS COMMISSION**
**Washington, DC. 20554**

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| **In the Matter of** | ) | |
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| **Carrier Current Systems,** | ) | **ET Docket No. 03-104** |
| **including Broadband over** | ) | |
| **Power Line Systems** | ) | |
| | ) | |
| **Amendment of Part 15 regarding** | ) | **ET Docket No. 04-37** |
| **new requirements and** | ) | |
| **measurement guidelines for Access** | ) | |
| **Broadband over Power Line** | ) | |
| **Systems** | ) | |

**To: The Commission**

I am requesting that the Commission immediately reconsider the Notice of Proposed Rulemaking as expressed in ET Docket No. 04-37. This request is made in light of the documented interference caused by Access BPL to the HF spectrum. Clearly, evidence submitted during the Notice of Inquiry period has not been thoroughly and comprehensively reviewed or the Commission would have recognized that Access BPL interference to the HF spectrum has been documented.

The largest objection to the rollout of Access BPL is the interference that it causes to licensed users of the radio spectrum. While the Commission acknowledges this objection, the decision has been made to proceed even though initial studies have concluded that BPL interference is likely. Studies that will provide additional clarity to the full interference potential of Access BPL by NITA and the American Radio Relay League are still in process; however, the Commission has dismissed the prudent opportunity to analyze their findings prior to issuing the NPRM.

Allowing BPL to proceed before these studies have been completed puts both licensed users of the HF spectrum and Access BPL providers at unnecessary risk. Licensed users risk interference from Access BPL. Access BPL providers causing interference will be required to eliminate interference. If they can not eliminate the interference, they must cease operation. Access BPL providers risk the loss of significant capital investment and degradation of the Public's good will.

The Commission states in ET Docket 04-37 Paragraph 33:

*While we agree that there is some potential for Access BPL to cause harmful interference to radio services, we also tentatively conclude that the likelihood of such harmful interference is low under the current limits and that where such interference does occur, there are remedies that the Access BPL operator can employ to eliminate such interference.*

During the NOI comment period, the American Radio Relay League submitted documentation that clearly demonstrates evidence to the contrary. In addition, a video documenting Access BPL

interference is available for download from the ARRL website at http://216.167.96.120/BPL_Trial-small.mpg. I encourage anyone to view this video that has not already done so. It very clearly documents serious BPL interference. Normal radio communications can not be conducted with the level of interference demonstrated. The claims that BPL does not cause harmful interference are simply unfounded. It clearly does; it has been reported, and this interference must be recognized. The interference issue is also raised by NITA, FEMA, World Broadcasters and others.

The Commission states in ET Docket 04-37 Paragraph 8:

*In the Inquiry, the Commission asked for comments on the characteristics of BPL technology, the status of deployment of BPL and any standards work related to BPL. The Commission also asked for comments on the probable interference environment and propagation patterns of BPL and the mitigation techniques used by BPL to avoid interference. The Commission further asked whether it would be possible to develop a standardized measurement method for testing BPL, and if so, how to develop it. It requested input on whether there are any international standards that should be investigated for possible adoption in order to facilitate the development of BPL products for a global marketplace.*

Many respondents to the Inquiry stated that other countries including Japan have prohibited Access BPL due to interference. The Commission did not address this additional evidence that Access BPL in fact does cause interference. It did not provide reasonable discussion to explain that Access BPL will somehow behave differently in the United States. Without further information, one can only conclude that Access BPL will cause interference in the United States.

The Commission states in ET Docket 04-37 Paragraph 35:

*We recognize that amateur operations are likely to present a difficult challenge in the deployment of Access BPL in cases where amateurs use high gain outdoor antennas that are located near power lines. In considering this interference potential, we note that ARRL acknowledges that noise from power lines, absent any Access BPL signals, already presents a significant problem for amateur communications. We therefore would expect that, in practice, many amateurs already orient their antennas to minimize the reception of emissions from nearby electric power lines. Further, we note that many Access BPL technologies have the capability to avoid using specific frequencies, if necessary, to avoid interference. This would permit Access BPL devices to avoid the use of amateur frequencies when in close proximity to amateur outdoor antennas.*

For the Commission to recognize that deployment of Access BPL will likely be a difficult challenge in light of the licensed amateur radio service but to also say in paragraph 33 that "the likelihood of harmful interference is low" is contradictory at best.

Paragraph 35 demonstrates a lack of practical understanding of the amateur service. Amateur radio operators who have directional antennas will generally orient them so that the signals between the stations in contact are optimized. Most directional antennas are equipped with rotors and may be turned frequently during a single operating session. Orienting an antenna to reduce interference (that should not be received in any case) is not the first criteria for aiming an antenna. In addition, many amateur radio operators are on small lots, and therefore do not have the option of moving their antennas any significant distance from overhead power lines.

Requiring Access BPL providers to change frequencies if causing interference is not practical unless the following spectrum allocated to the amateur radio service is entirely excluded from Access BPL use:

1.8-2.0 MHz, 3.5-4.0 MHz, 5.332 MHz, 5.348 MHz, 5.368 MHz, 5.373 MHz, 5.405 MHz, 7.0-7.3 MHz, 10.1-10.15 MHz, 14.0-14.35 MHz, 18.068-18.168 MHz, 21.0-21.45 MHz, 24.89-24.99 MHz, 28-29.7 MHz, 50-54 MHz, 144-148 MHz, 222-225 MHz, 420-450 MHz, 902-928 MHz, 1240-1300 MHz, 2300-2310 MHz, 2390-2450 MHz, 3300-3500 MHz, 5650-5925 MHz, 10.00-10.50 GHz, 24.0-24.25 GHz, 47.0-47.2 GHz, 75.5-81.0 GHz, 119.98-120.02 GHz, 142.0-149.0 GHz, 241.0-250.0 GHz, All above 300 GHz

Amateur radio operators generally tune throughout many of the above frequencies during a single operating session. It would be unfair and impractical for the amateur radio operator to contact the Access BPL provider with each frequency change. Obviously, the Access BPL provider would not be able to respond timely. Furthermore, there is no provision for mobile operations where the proximity to any one BPL transmission is dynamic.

The Commission states in ET Docket 04-37 Paragraph 37:

*With regard to potential interference to the non-amateur radio services, such as public safety, maritime and other operations, we believe that the risk of harmful interference from Access BPL operations is low.*

Since the amateur radio service is specifically omitted from this statement, the obvious conclusion is that the risk to the amateur radio service is NOT low.

The Commission states in ET Docket 04-37 Paragraph 39:

*Notwithstanding compliance with the Part 15 emission limits, we wish to emphasize that Access BPL would also operate under our Part 15 non-interference conditions. Thus, operations must cease if harmful interference to licensed services is caused. Given that there is significant investment in the deployment of the service, we agree with several commenters that Access BPL providers would have a strong incentive to exercise the utmost caution in installing their systems to avoid harmful interference and ensure uninterrupted service to their customers.*

Since the threat of interference has been clearly established, the most prudent course of action for both licensed users and Access BPL providers is to wait until the interference issue is properly investigated. After the interference potential is better understood, the rules governing Access BPL should be implemented so that the risk of interference to any licensed service is eliminated. While I appreciate the assurance that as a licensed user I can expect the amateur radio service to continue free of interference, I'm deeply concerned that interference will not be mitigated without my active involvement as currently proposed.

If Access BPL rollout does move forward as currently proposed, Access BPL providers must fully understand that there are well over half a million licensed amateur radio operators in the United States who will be carefully monitoring for interference. Generally speaking, amateur radio operators are intelligent, highly motivated, and more technically oriented than the average citizen. They have invested a significant amount of personal funds in support of a service that many hold with a great deal of passion.

Amateur radio operators will not fail to exercise the rights available to them to require Access BPL providers to cease operation when interference is detected. Indeed, Access BPL providers "have a strong incentive to exercise the utmost caution in installing their systems to avoid harmful interference and ensure uninterrupted service to their customers".

Thank you for your time and consideration in this matter.

Sincerely,
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Extra Class Amateur Radio Operator - N3FJP